

REMARKS

By the above actions, claim 1 has been replaced by a new independent claim 13, claims 10 and 12 have been amended to depend from new claim 13 and claims 1-9 and 11 have been cancelled, reserving the right to pursue the non-elected embodiments in a divisional application. In view of the above amendments and the following remarks, further consideration of this application is now requested. Furthermore, entry of this Amendment is in order since it reduces the issues remaining for the Examiner's consideration by significantly reducing the number of claims remaining and eliminating the indefinite issues under § 112.

With regard to the rejections under 35 USC § 112, it is submitted that the above amendments eliminates all of the issues raised by the Examiner so that new claim 13 should be found to be both clear and definite as well as fully consistent and supported by the specification. In particular, claim 13 no longer recites any flow controllers and the "means" recitations clearly invoke the sixth paragraph of § 112 reciting functions without any terms that would impart structure. Furthermore, since the means plus function clauses include the disclosed structure for accomplishing the recited functions and the equivalents thereof, there is no ambiguity or shortage of requisite structure as the Examiner found to be the case for prior claim 1. Accordingly, the rejections under § 112 should now be withdrawn and such action is hereby requested.

The Examiner has rejected all of claims 1-3 and 10-12 under 35 USC § 103 based on the disclosure of the published application of Herta et al. when viewed in combination with the patent to Saperstein, either by themselves or in further combination with the patent to Brocx and optionally also the Rafalovich et al. patent, as well as in further combination with the Baier et al. patent. These rejections are inappropriate insofar as they related to the claims as now presented for the following reasons.

First of all, to facilitate the Examiner's understanding of the differences between the present invention and the prior art, appended hereto are sketches in which the systems of the prior art have been drawing in a manner which corresponds to the manner in which the present invention has been illustrated, i.e., in a manner as shown in Fig. 1 of this application. However, it should be appreciated that this sketches have been prepared with knowledge of the invention for purposes of showing that even a combination of the prior art would not lead

to the present invention and should not be construed in any way as an admission that the combinations of features of the prior art references would have been obvious.

Examination of the primary reference to Herta et al. in comparison to claim 13 reveals that they disclose a device for climate control, comprising:

- a coolant circuit including a compressor 21, a condenser 22, and an evaporator 30;
- a heat transfer medium circuit including a heat source 10 and a heat exchanger 17;
- a heat/cold reservoir 33 in which the evaporator 30 and the heat exchanger 17 are located; and
- a first heating/cooling surface 12 integrated in the heat transfer medium circuit and being connected in parallel to the heat exchanger 17;
- means 19, 20 for selectively connecting the first heating/cooling surface 12 with the heat exchanger 17; and
- means 20 for selectively connecting the first heating/cooling surface 12 with the heat source 10.

However, Herta et al. do not disclose the use of:

- a second heating/cooling surface integrated in the heat transfer medium circuit and being connected in parallel to the first heating/cooling surface;
- means for selectively fluid conductively connecting the second heating/cooling surface with the heat exchanger; and
- means for selectively fluid conductively connecting the second heating/cooling surface with the heat source.

It is the Examiner's position that a combination of Herta et al. with Saperstein, or in further combination with the patent to Brocx and optionally also the Rafalovich et al. patent would suggest a system with these additional features that are absent from the Herta et al. system. However, as will be apparent from the following, the combination of the teachings of these references leads to a system that is at a minimum very different from the present invention and in some cases simply an unworkable result.

The Saperstein et al. patent teaches placing the evaporator 62, compressor 38 and condenser 44 of the refrigerant circuit close together to minimize the leakage of CFCs and other chemicals in the engine compartment forward of the firewall (see, first sentence of Abstract, column 5, lines 53-58, and column 6, lines 4-9). As a result, Saperstein et al. the

flow path 65 connects the several heat exchangers 68, 69, 86, each of which serves for cooling of respective area/component. The engine does not and cannot serve as a heat source for these heat exchangers because, as shown in Fig. 1, it is not connected heat transfer medium circuit. Anyone applying the teachings of Saperstein et al. patent to the system of Herta et al. would be led to separate their cooling function from their engine and radiator since the shortness of the lines requires the provision of the condenser liquid cooling circuit "to provide sufficient quantity of cool liquid to the cool the condenser 44" (see, column 5, lines 35-38). Thus, the combination of the teachings of these two patents would lead away from the present invention in which a single circuit arrangement provides for selective heating and cooling of separate areas as well as charging of the heat/cold reservoir.

The Brocx et al. patent discloses a heating system in which a heater 30 for a sleeper unit, a heater unit 4 for a cab and a bypass passageway with a hose 42 are connected to a water jacket of an engine 6 by tow manifolds 10, 14. The auxiliary heater 30, the heater unit 4 and the bypass passageway are connected in parallel because the by pass passageway opens in response to a pressure differential between the supply line and the return line of the heater unit 4 so that the entire system can be controlled by means of a single control valve 26. However, this parallel arrangement is not applicable to the system of Herta et al. because of the presence of the heat exchanger 17 and auxiliary heater 14 in the Herta et al. system which could not function properly if the bypass passageway of Brocx et al. were incorporated along with the 3-way valve 20 for controlling pressures in the fluid lines of their heat exchangers. In this regard, it is pointed out that it is improper to view individual aspects of a reference in isolation to their role in the overall disclosure, and in this case, the existence of a parallel connection cannot be viewed without regard to the reason why it is present and how it relates with to other components. A myriad of devices use parallel flow connections and that fact combined with the fact that Herta et al. do not points more to the unobviousness of the proposed combination rather than supporting a conclusion of obviousness.

Rafalovich et al. teach the provision of a thermal storage apparatus including several fluid circuits for delivering thermal energy to both a passenger compartment and a component, such as a battery. As a result, a refrigerant loop 168 of a closed transfer loop 156 is provided in the thermal storage apparatus while a remote discharge coil 222, a battery heat exchanger 910 and an ignition heat exchanger 920 are provided in the closed transfer loop.

Here again, the Examiner is improperly relying on an isolate characteristic (the parallel connection) of the disclosure without giving consideration to the overall system and the role that it plays in it. As already noted, the mere existence of numerous systems with parallel circuits is acknowledged, that fact only leads to the conclusion that a parallel circuit was considered inappropriate for use in Herta et al. circuit, and in fact, any system which incorporated the attributes of Rafalovich et al. into the Herta et al. circuit in a manner consistent with its use by Rafalovich et al. would result in a much more complicated system that is completely different from that of the present invention.

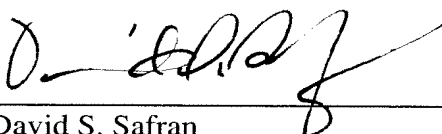
Lastly, with regard to the Baier et al patent, which the Examiner relies upon simply for its use of a plate type heat exchanger, even if such a heat exchanger is used as the heat exchanger of the Herta et al. circuit, it would not lead to the present invention. Moreover, the system of Baier is fundamentally different from that of Herta et al. and cannot correct for the incompatibility of the numerous different concepts of the patents that Examiner has relied upon isolated aspects of to apply to the Herta et al. system.

The Examiner is reminded of the fact that it has been held that the capabilities of one skilled in the art is not synonymous with obviousness *Ex parte Gerlach and Woerner*, 212 USPQ 471 (PTO Bd. Of App. 1980) and that the fact that a modification could be made does not make it obvious absent a teaching of the desirability to make the modification, *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984). There is simply nothing in the disclosure of the Herta et al. patent which would provide a reason or suggest the desirability of making modifications of the type proposed by the Examiner. Likewise, there is nothing about the disclosures of the Saperstein, Brocx, Rafalovich et al. and Baier et al. patents which would motivate one of ordinary skill to implement isolated characteristics of theirs in the very different system of the Herta et al. patent. Therefore, it is submitted that a proper case for obviousness of the present invention has not been made by the Examiner, and that the invention as defined by new claim 13 is patentably unobvious with respect to the combined teachings of these five references when they are properly considered for what they actually teach. Therefore, withdrawal of the outstanding rejections under § 103 is in order and is hereby requested.

On the basis of the foregoing, in the absence of new and more pertinent prior art being discovered, it is submitted that this application is in condition for allowance and action to that

effect is hereby requested. However, even though the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,

By: 

David S. Safran
Registration No. 27,997

Customer No. 25570

Roberts Mlotkowski & Hobbes P.C
P. O. Box 10064
McLean, VA 22102

Direct Telephone: (703) 584-3273

DSS:kmm